



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,981	01/20/2004	George Reisch Aschauer		1980

35317 7590 02/03/2006

GEORGE REISCH ASCHAUER
2214 RED OAK CT.
BEMIDJI, MN 56601

EXAMINER

BONCK, RODNEY H

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/760,981	Applicant(s) ASCHAUER, GEORGE REISCH	
	Examiner Rodney H. Bonck	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the amendment received November 14, 2005. It appears that a substitute specification and abstract is proposed with the first response filed October 25, 2005. The examiner has approved entry of the proposed substitute specification and proposed new abstract.

Drawings

Receipt is acknowledged of the replacement sheets of drawing modifying Fig. 2 and adding Fig. 3. The examiner has approved these sheets for entry. Since modified forms are no longer shown in a single view, the previous objection to the drawings is withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, there is no proper antecedent for "the plates", line 1, "the rotating plate", line 4, or "the sliding friction surfaces", line 5. In claim 4, the antecedent of "the impeller vane" is unclear since a multiplicity of pumping impeller vanes have been defined. In line 3 of claim 4, "the impeller vane pumping

surface" lacks a proper antecedent basis; and, in lines 4-5, "the back side of the adjacent leading impeller vane" lacks a proper antecedent basis. In claim 5, "the impelling surface" and "the adjacent ahead leading vane" each lack a proper antecedent basis, and it is not clear whether or not the claimed chamber forms a circular chamber, since the claim merely states that it "may form" a circular chamber. It appears that "may form" should be changed to -- forms --. In claim 7, there is no antecedent for "the leading pumping surface" or for "the leading adjacent impeller vane". It is not clear what is meant by "a decelerating cavity", line 3 of claim 7. In claim 8, there is no proper antecedent basis for "the plates", line 1, "the friction surfaces", line 3, and "the rotating plates", line 4. In lines 5-6 of claim 8, it is not clear what is meant by "described as two adjacent vanes". There is no proper antecedent for "their mating stationary side walls", line 6 of claim 8. In claim 9, "the inlet area" has no proper antecedent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Malinowski('298). Malinowski discloses an interleaved friction plate braking device including means for cooling friction surfaces of the plates using a multiplicity of external closely confined impeller vanes 90 on the outside diameter of rotating plates to impact a

stationary fluid reservoir 82. Rotation of the plates imparts an inward flow through passages lubricating the friction surfaces 87. As the plates rotate out of the fluid reservoir, centrifugal force would inherently result in an outward flow of coolant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malinowski('298) in view of Borck et al.('860). Malinowski discloses an interleaved friction plate braking device including means for cooling friction surfaces of the plates using a multiplicity of external closely confined impeller vanes 90 on the outside diameter of rotating plates to impact a stationary fluid reservoir 82. Even if the impeller vanes in Malinowski were not considered to be "on the outside diameter", so positioning the vanes would have been obvious from Borck et al., where impeller vanes 33 are clearly on the outer diameter of the plate, the motivation being to allow a lower reservoir level. The Borck et al. device further teaches providing a chamber along the edge of the plate at 44 between the back end of one impeller blade and the pumping surface of the next blade and between the facing surfaces of adjacent plate surfaces. The Malinowski device also forms chambers between the impeller edges and the adjacent

plate faces. While the Borck et al. device is a clutch rather than a brake, clutches and brakes are so closely related that the artisan would have found the cooling arrangements in one to be applicable to the other. Furthermore, during coasting or back driving, the Borck et al. device would act as a brake.

Response to Arguments

Applicant's arguments have been considered by are not persuasive. Applicant argues that in Malinowski the pumping blades occupy a large percentage of the friction area. The claims are silent in this regard; however, *i.e.*, no particular percentage of the friction area is claimed. Additionally, it noted that the grooves 3 in applicant's device cut through the friction material just as in Malinowski. Concerning Borck et al. applicant maintains that the vanes occupy a minimal amount of pump volume. Nothing in the claims, however, distinguishes over any pump volume disclosed by Borck et al. Applicant points out that the scoops in Borck et al. are continuously in the rotating sump. A stationary reservoir is disclosed in Malinowski, however. In Malinowski, the scoops would contact the sump area only during a small part of each revolution. Applicant appears to be pointing out structure claimed by Borck et al. that is not in the present application. This has no bearing on the patentability of applicant's claims. The question is whether structure defined by applicant's claims is disclosed or obvious over in the prior art patents. For the reasons noted above applicant's claims are deemed unpatentable over Malinowski, particularly when considered in view of Borck et al.

Conclusion

This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims appealed. The Notice of Appeal must be accompanied by the required appeal fee of \$250 (small entity).

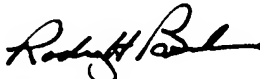
If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

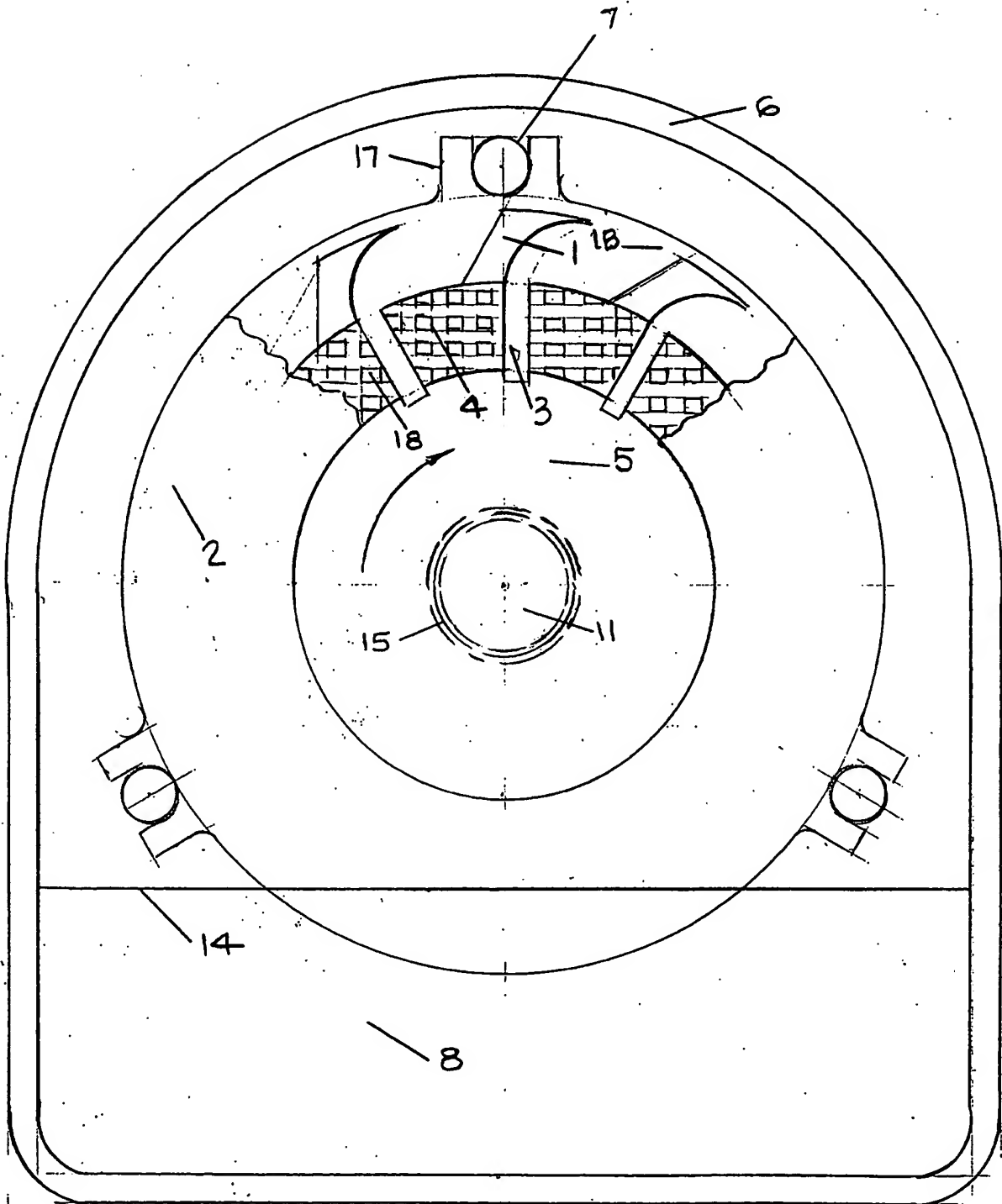

Rodney H. Bonck
Primary Examiner
Art Unit 3681

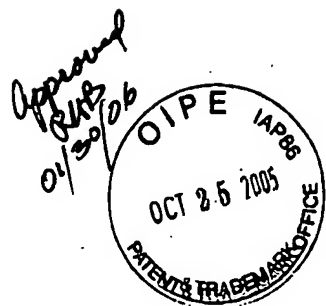
rhb
January 30, 2006

Approved
21/30/06



FIG-3 REPLACEMENT SHEET





REPLACEMENT SHEET

FIG-2

